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(FILE 'HOME' ENTERED AT 11:34:11 ON 21 JAN 2005)

FILE 'MEDLINE, AGRICOLA, SCISEARCH, CAPLUS, MEDICONF' ENTERED AT 11:34:25 ON 21 JAN 2005

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L1       117067 S OOPLASTOID OR OOCYTE
L2        24511 S ENUCLEAT? OR REMOV?(5W)NUCLE?
L3         4015 S METAPHASE (2W)II
L4        10562 S ZONA (5W) PELLUCIDA
L5          666 S L4 (L) REMOV?
L6           11 S L1 (L) L2 (L) L5
L7            9 DUP REM L6 (2 DUPLICATES REMOVED)
L8            9 SORT L7 PY
L9          283 S L1 (L) L5
L10         148 DUP REM L9 (135 DUPLICATES REMOVED)
L11         122 S L10 AND PY<=2001
L12         122 FOCUS L11 1-
L13          95 S ZONA (3W) PELLUCIDA (3W) REMOV?
L14          82 S L13 AND PY<=2001
L15           3 S L14 AND (NUCLE? (5W) TRANS?)
L16          82 FOCUS L14 1-
L17           3 S L14 AND CLON?
L18          47 DUP REM L14 (35 DUPLICATES REMOVED)
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=> d an ti so au ab pi l18 2 6 8 11 41 42

L18 ANSWER 2 OF 47 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2001:12592 CAPLUS
DN 134:81720
TI Method for producing cloned cows by transferring somatic nucleus to enucleated oocyte
SO PCT Int. Appl., 31 pp.
CODEN: PIXXD2
IN Lee, Byeong-chun; Shin, Tae-young; Roh, Sang-ho; Lim, Jeong-muk; Park, Jong-im; Cho, Jong-ki; Kim, Ki-yon; Lee, Eun-song; Shin, Soo-jung; Kim, Sung-ki; Song, Kil-young
AB The present invention provides a method for producing cloned cows by employing in vitro maturation of oocyte and nuclear transfer techniques. The method for producing cloned cows of the invention comprises the steps of: preparing donor somatic cells lines collected from cow; maturing oocytes collected from ovary in vitro; removing the cumulus cells surrounding the oocytes; cutting a portion of zona pellucida of the matured oocytes to make a slit, and squeezing out a portion of cytoplasm including the first polar body through the slit to give enucleated recipient oocytes; transferring a nucleus to the recipient oocyte by injection of the donor cells to the enucleated recipient oocytes, followed by the subsequent electrofusion and activation of the electrofused cells to give embryos; postactivating and culturing the embryos in vitro; and, transferring the cultured embryos into surrogate cows to produce cloned calves. The cloned cows can be employed to produce pharmaceuticals or organs, which facilitates their universal uses in medical and livestock industry, and scientific studies as well.

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2001000795	A1	20010104	WO 2000-KR707	20000630 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
KR 2001005423	A	20010115	KR 1999-31527	19990731 <--
KR 2001005424	A	20010115	KR 1999-31528	19990731 <--
KR 2001005425	A	20010115	KR 1999-31529	19990731 <--
CA 2334382	AA	20010104	CA 2000-2334382	20000630 <--

L11 ANSWER 11 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2001:12590 CAPLUS
DN 134:68448
TI Method for producing human cloned embryos by employing inter-species nuclear transplantation technique
SO PCT Int. Appl., 27 pp.
CODEN: PIXXD2
IN Lee, Byeong-Chun; Shin, Tae-Young; Roh, Sang-Ho; Lim, Jeong-Muk; Park, Jong-Im; Cho, Jong-Ki; Kim, Ki-Yon; Lee, Eun-Song; Shin, Soo-Jung; Kim, Sung-Ki; Han, Jae-Yong; Yong, Hwan-Yul; Choi, Yun-Hee; Ko, Bong-Kyung; Song, Kil-Young
AB The present invention provides a method for producing human cloned embryos by employing inter-species nuclear transplantation technique. The method for producing human cloned embryos of the invention comprises the steps of: preparing donor somatic cell lines collected from human; maturing **oocytes** collected from ovary of cow in vitro; removing the cumulus cells surrounding the **oocytes**; cutting a portion of **zona pellucida** of the matured **oocytes** to make a slit, and squeezing out a portion of cytoplasm including the first polar body through the slit to give **enucleated** recipient **oocytes**; transferring a nucleus to the recipient **oocyte** by injection of the donor cells to the **enucleated** recipient **oocytes**, followed by the subsequent electrofusion and activation of the electrofused cells to give embryos; and, postactivating and culturing the embryos in vitro. The human cloned embryos of the invention can be employed to obtain the human embryonic stem cells, which may be widely applied in biol. and medical fields. An embryo, SNU6, was prepared from human skin cells as nucleus donors and **oocytes** from Korean cows as recipients.

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2001000793	A1	20010104	WO 2000-KR705	20000630
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
KR 2001005423	A	20010115	KR 1999-31527	19990731
KR 2001005424	A	20010115	KR 1999-31528	19990731
KR 2001005425	A	20010115	KR 1999-31529	19990731
CA 2334953	AA	20010104	CA 2000-2334953	20000630
EP 1109890	A1	20010627	EP 2000-941005	20000630
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, MC, PT, IE, SI, LT, LV, FI, RO				
KR 2001069215	A	20010723	KR 2000-36742	20000630
JP 2003503044	T2	20030128	JP 2001-506787	20000630
RU 2216591	C2	20031120	RU 2000-132213	20000630
NZ 508734	A	20040326	NZ 2000-508734	20000630
KR 2001069217	A	20010723	KR 2000-37774	20000703

L11 ANSWER 9 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2001:12592 CAPLUS
DN 134:81720
TI Method for producing cloned cows by transferring somatic nucleus to enucleated oocyte
SO PCT Int. Appl., 31 pp.
CODEN: PIXXD2
IN Lee, Byeong-chun; Shin, Tae-young; Roh, Sang-ho; Lim, Jeong-muk; Park, Jong-im; Cho, Jong-ki; Kim, Ki-yon; Lee, Eun-song; Shin, Soo-jung; Kim, Sung-ki; Song, Kil-young
AB The present invention provides a method for producing cloned cows by employing in vitro maturation of **oocyte** and nuclear transfer techniques. The method for producing cloned cows of the invention comprises the steps of: preparing donor somatic cells lines collected from cow; maturing **oocytes** collected from ovary in vitro; removing the cumulus cells surrounding the **oocytes**; cutting a portion of **zona pellucida** of the matured **oocytes** to make a slit, and squeezing out a portion of cytoplasm including the first polar body through the slit to give **enucleated** recipient **oocytes**; transferring a nucleus to the recipient **oocyte** by injection of the donor cells to the **enucleated** recipient **oocytes**, followed by the subsequent electrofusion and activation of the electrofused cells to give embryos; postactivating and culturing the embryos in vitro; and, transferring the cultured embryos into surrogate cows to produce cloned calves. The cloned cows can be employed to produce pharmaceuticals or organs, which facilitates their universal uses in medical and livestock industry, and scientific studies as well.

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2001000795	A1	20010104	WO 2000-KR707	20000630
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
KR 2001005423	A	20010115	KR 1999-31527	19990731
KR 2001005424	A	20010115	KR 1999-31528	19990731
KR 2001005425	A	20010115	KR 1999-31529	19990731
CA 2334382	AA	20010104	CA 2000-2334382	20000630
EP 1109891	A1	20010627	EP 2000-941007	20000630
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, MC, PT, IE, SI, LT, LV, FI, RO				
KR 2001069215	A	20010723	KR 2000-36742	20000630
AU 753207	B2	20021010	AU 2000-55778	20000630
JP 2003503046	T2	20030128	JP 2001-506789	20000630
NZ 508734	A	20040326	NZ 2000-508734	20000630
US 6590139	B1	20030708	US 2000-701839	20001204

L11 ANSWER 8 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1998:485160 CAPLUS
DN 129:92567
TI A method of oocyte enucleation and production of reconstituted embryos
SO PCT Int. Appl., 43 pp.
CODEN: PIXXD2
IN Peura, Teija
AB The present invention relates to a process for the **enucleation** of **oocytes** and the production of cytoplasts and to the use of such cytoplasts and **oocytes** in a process of nuclear transplantation for the production of nuclear transfer embryos and multiple offspring of genetic similarity. Accordingly, the present invention provides a method for **enucleating** an **oocyte** which method includes: providing an **oocyte** having a polar body, metaphase plate and cytoplasm; subjecting the **oocyte** to a compound capable of causing attachment of the polar body to the **oocyte**; and **enucleating** the **oocyte** by separating the polar body and a portion of cytoplasm containing the metaphase plate from remaining cytoplasm. Lectins, preferably phytohemagglutinins, are used to cause attachment of the polar body to the **oocyte**. Cytochalasin B is used to treat the **oocyte**, and pronase or protease used to remove the **zona pellucida**. In another aspect of the present invention there if provided a method of increasing cytoplasmic volume in an embryonic cell, said method including: providing at least two cytoplast prepared by a method of **enucleating** an **oocyte**; providing an embryonic cell; and fusing said cytoplasts with the embryonic cell. The method is exemplified by production of bovine nuclear transfer embryos.

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9829532	A1	19980709	WO 1997-AU868	19971222
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9878912	A1	19980731	AU 1998-78912	19971222
AU 746389	B2	20020502		
NZ 336493	A	20010126	NZ 1997-336493	19971222

L11 ANSWER 5 OF 17 SCISEARCH COPYRIGHT (c) 2005 The Thomson Corporation. on STN

AN 96:586224 SCISEARCH

TI FUNCTIONAL ENUCLEATION OF BOVINE OOCYTES - EFFECTS OF CENTRIFUGATION AND ULTRAVIOLET-LIGHT

SO THERIOGENOLOGY, (15 JUL 1996) Vol. 46, No. 2, pp. 279-284. ISSN: 0093-691X.

AU WAGONER E J; ROSENKRANS C F (Reprint); GLIEDT D W; PIERSON J N; MUNYON A L

AB Functional **enucleation** is removal or denaturation of an **oocytes** DNA without piercing the **zona pellucida** . Two experiments were conducted in this study to determine the effects of centrifugation, and ultraviolet (UV) light on metaphase II bovine **oocytes**. Experiment 1 evaluated the effects of centrifugation (12,000 x g for 4 min) on the cleavage rate of in vitro matured **oocytes**. Centrifugation decreased (P <0.05) the cleavage rate of **oocytes** (79.5 vs 70.4%). In addition, it was noted that there were two types of ooplasm after centrifugation, stratified and granular. Developmental potential, as represented by cleavage percent, of the two types of ooplasm was not significantly different. Experiment 2 was conducted to determine the interactive effects of centrifugation (as above) and UV light (254 nm) on cleavage rate of **oocytes** exposed as metaphase II **oocytes**. The UV light decreased (P <0.07) **oocyte** cleavage rates (35.4 vs 25.2%). Centrifuging metaphase II **oocytes** also decreased (P <0.07) cleavage rates (34.1 vs 26.5%). In addition, we determined the fate of chromosomes of **oocytes** centrifuged and(or) exposed to UV light. Both centrifugation and UV light alone affected (P <0.05) chromosome placement at 42+/-3 h after fertilization. Furthermore, centrifugation and UV light interactively increased (P <0.05) the percentage of non-cleaved **oocytes** with their DNA located in the perivitelline space (17.4, 15.5, 13.1, and 49.2, respectively, for control, UV exposed, centrifuged, and UV*centrifuged). Collectively. these data indicate that bovine **oocytes** at the metaphase II stage can be functionally **enucleated** with centrifugation and exposure to UV light; however, developmental potential may be diminished by those techniques.